ABSTRACT

A method and apparatus for lock a security gate operating shaft contained in a security gate operating mechanism having a housing from which extends the operating shaft, is disclosed, which may comprise: a locking collar mounted on the operating shaft for rotary motion along with the operating shaft, and having at least one engageable protrusion extending radially from the locking collar; an operating shaft locking mechanism slide mounting assembly attachable to the housing in one of at least two positions; a locking plate slideably mounted in the slide mounting and having an opening in registration with the operating shaft and having at least one locking finger extending into the opening and adapted to engage the at least one engageable protrusion; an electrically operated sliding unit adapted, when energized, to move the slideable plate to a first position against the force of gravity, and when deenergized to allow the slideable plate to move with the force of gravity to a second position; and, wherein the mounting of the slide mounting assembly in the first position of the slide mounting assembly places the at least one locking finger in a position to engage the at least one engageable protrusion when the electrically operated sliding unit is deenergized and the mounting of the slide mounting assembly in the second position of the slide mounting assembly places the at least one locking finger in a position to engage the at least one engageable protrusion when the electrically operated sliding unit is energized. The at lease one locking finger may comprise a first and a second locking finger, and wherein in the first mounting position of the slide mounting assembly the first locking finger is in the engaging position when the electrically operated sliding unit is deenergized and wherein in the second mounting of the slide mounting assembly the second locking finger is in the engaging position when the electrically operated sliding unit is energized. The locking collar may includes a plurality of engageable protrusions and the electrically operated sliding unit may comprise a solenoid operated arm connected to the locking plate. The locking collar may comprise a sprocket wheel having a plurality of radially extending sprocket teeth. The electrically operated sliding unit may be electrically connected to a power source

that is also electrically connected to the source of electrical power for operating the operating shaft and the first mounting position of the slide mounting assembly is a fail-locked position, or the electrically operated sliding unit may be electrically connected to a power source that is also electrically connected to the source of electrical power for operating the operating shaft and the first mounting position of the slide mounting assembly is a fail-locked position.